

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. **(Currently Amended)** A method of dynamically determining an optimal advertisement to be used by an Internet merchant, comprising:

(a) receiving configuration data from the Internet merchant, wherein such configuration data comprises: ~~a percentage~~

a sample size of visitors to the Internet website who are to participate in an ~~experiments~~ experiment, and

time-related information concerning the ~~experiments~~ experiment;

(b) randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in the ~~experiments~~ experiment according to the configuration data;

(c) running the ~~experiments~~ experiment according to the configuration data ~~on~~ on the randomly chosen ~~visitors~~ sample of visitors to produce sampling data, wherein the experiment comprises:

presenting a plurality of varied advertisements to different visitors within
the sample according to the configuration data; and

measuring the effectiveness of the plurality of varied advertisements on the sample;

(d) dynamically determining an optimal advertisement using real time analysis of the sampling data from the experiment, wherein the determination of the optimal advertisement involves real time learning from the analyses of the experiments of step ~~(e);~~ and

(e) thereafter using the optimal advertisement determined in step (d).

2. **(Previously Presented)** The method of claim 1, wherein step (d) comprises determining an advertisement that optimizes highest click-through rate.

3. **(Previously Presented)** The method of claim 1, wherein step (d) comprises determining an advertisement that optimizes highest buy-rate.

4. **(Previously Presented)** The method of claim 1, wherein step (d) comprises determining an advertisement that optimizes a combination of click-through rates and buy-rates.

5. **(Original)** The method of claim 4, wherein the combination is determined through a weighted formula.

6. **(Original)** The method of claim 1, wherein said configuration data includes sampling parameters.

7. **(Previously Presented)** The method of claim 1, where said configuration data includes potential advertisements that are offered to the sampled visitors in step (c).

8. **(Original)** The method of claim 1, wherein said configuration data includes whether the sampling is to be performed continuously or at discrete intervals.

9. **(Previously Presented)** The method of claim 1, wherein said configuration data includes data for segmenting the visitors into clusters.

10. **(Original)** The method of claim 1, wherein said configuration data includes a minimum threshold for automatically propagating an optimal advertisement.

11. **(Currently Amended)** The method of claim 1, wherein said random sampling is performed on the entire population of visitors to the Internet website.

12. **(Currently Amended)** The method of claim 1, wherein visitors to the Internet website are grouped, and each group is sampled separately.

13. **(Previously Presented)** The method of claim 12, wherein the optimal advertisement determined for each group optimizes price.

14. **(Currently Amended)** The method of claim 13, additionally comprising updating the Internet website such that a visitor is presented with the optimal advertisement determined in step (d) according to the visitor's group.

15. **(Original)** The method of claim 12, wherein groups are determined based upon prior purchasing behavior.

16. **(Original)** The method of claim 12, wherein groups are determined based upon demographic characteristics.

17. **(Currently Amended)** The method of claim 1, additionally comprising:

(d) automatically updating the Internet website to use the optimal advertisement determined in step (c).

18. **(Currently Amended)** The method of claim 1, additionally comprising:

(d) automatically updating the Internet website to use the optimal advertisement determined in step (c) if the determination for the optimal advertisement meets a minimum threshold.

19. **(Currently Amended)** The method of claim 18, wherein the minimum threshold is ~~that the optimal determined in step (c)~~ is a predetermined percentage better than a currently offered advertisement.

20. **(Currently Amended)** A method of dynamically determining an optimal advertisement to be used by an Internet merchant, comprising:

(a) receiving configuration data from the Internet merchant, wherein such configuration data comprises: ~~a percentage~~

a sample size of visitors to the Internet website who are to participate in an ~~experiments~~ experiment; and

time-related information concerning the ~~experiments~~ experiment;

(b) randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in the ~~experiments~~ experiment according to the configuration data;

(c) running the ~~experiments~~ experiment according to the configuration data ~~on~~ on the randomly chosen ~~visitors~~ sample of visitors to produce sampling data, wherein the experiment comprises:

presenting a plurality of varied advertisements to different visitors within the sample according to the configuration data; and

measuring the effectiveness of the plurality of varied advertisements on the sample;

(d) dynamically determining an optimal advertisement using real time analysis of the sampling data from the experiment, wherein the determination of the optimal advertisement involves real time learning from the analyses of the experiments of step (e);

(e) thereafter using the optimal advertisement determined in step (d); and

(f) repeating steps (a) - (e) using ~~the determinations made~~ sampling data obtained in step (c) as configuration data in step (a).

21. (Cancelled)

22. (Cancelled)